Claims

1. A process for producing a catalyst for gas-phase oxidations, in which a suspension of TiO_2 and V_2O_5 particles is applied to a fluidized inert support, wherein at least 90% by volume of the V_2O_5 particles have a diameter of 20 μm or less and at least 95% by volume of the V_2O_5 particles have a diameter of 30 μm or less.

2. The process according to claim 1, wherein at least 90% by volume of the V_2O_5 particles have a diameter of 15 μm or less and at least 95% by volume of the V_2O_5 particles have a diameter of 20 μm or less.

3. The process according to claim 1 or 2, wherein at least 50% by volume of the V_2O_5 particles have a diameter of more than 2 μm.

4. The process according to any of claims 1 to 3, wherein the suspension further comprises at least one cesium, phosphorus and/or antimony source.

5. The process according to any of the preceding claims, wherein the catalytically active composition comprises from 1 to 40% by weight of vanadium oxide, calculated as V_2O_5, and from 60 to 99% by weight of titanium dioxide, calculated as TiO_2.

6. The process according to claim 5, wherein the catalytically active composition further comprises, based on the total amount of catalytically active composition, up to 1% by weight of a cesium compound, calculated as Cs, up to 1% by weight of a phosphorus compound, calculated as P, and up to 10% by weight of antimony oxide, calculated as Sb_2O_3.